

# **Commonwealth of Massachusetts Sustainable Design Roundtable**

January 13, 2005  
Meeting Notes

*sponsored by the*  
Executive Office of Environmental Affairs  
Division of Capital Asset Management

*through a grant from the*  
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## **Introduction**

As part of larger efforts to promote sustainability and sound environmental policy, the Commonwealth of Massachusetts is exploring ways in which state actions, activities and programs can better incorporate sustainable design practices into public building construction projects, whenever possible. To initiate this effort, the Executive Office of Environmental Affairs (EOEA), in collaboration with the Division of Capital Asset Management (DCAM) and the Massachusetts Technology Collaborative (MTC), established a Sustainable Design Roundtable to foster and promote dialogue about green buildings between the public and private sectors, to investigate the barriers to sustainable design and construction in public building projects, and to recommend strategies to promote more green building practices in state construction.

On January 13, 2005, sixty design and construction professionals and other experts responsible for funding, planning and managing public construction from the public and private sectors participated in the first meeting of the Sustainable Design Roundtable in Boston, Massachusetts. The meeting agenda in Appendix A provides an outline of what happened during the all-morning session. After opening remarks and an explanation of the Roundtable's goals and objectives, the participants separated into seven working groups to discuss barriers and opportunities for sustainable design in public construction. At the end of the session, the working groups presented their initial findings to the larger Roundtable group. These notes represent a summary of the initial findings of the working groups as well as highlight the Roundtable's goals and objectives and what was discussed during this first session.

## **Kick Off Remarks**

Eric Friedman, EOEA and John DiModica, DCAM, as Co-Chairs of the Roundtable, introduced the keynote speakers. The Roundtable meeting began with opening remarks by:

- Douglas Foy, Secretary, Office of Commonwealth Development
- Ellen Roy Herzfelder, Secretary, Executive Office of Environmental Affairs
- David Perini, Commissioner, Division of Capital Asset Management
- Rob Pratt, Director, Renewable Energy Trust.

All the speakers expressed their appreciation to Roundtable participants for taking the time to find ways to promote more sustainable design and construction in public buildings. The speakers also recognized the importance of sustainable design in public construction and noted how sustainable design is in line with the Commonwealth's environmental priorities of mitigating climate change, increasing smart growth and promoting healthy buildings and workers.

After opening remarks, the Roundtable participants were then asked to briefly introduce themselves. Appendix B lists the attendees of the first Roundtable session.

## **Background, Structure and Goals**

**Marie Zack Nolan, Executive Office of Environmental Affairs  
Sustainable Design Research Coordinator**

### *Public Design and Construction in Massachusetts*

Massachusetts is in a position to serve as a leader in sustainable construction projects as the state owns over 5,000 buildings, covering 92 million square feet of space, and spends over \$300 million annually on construction and renovation projects each year. The Commonwealth funds, plans and manages a wide variety of public projects from schools, hospitals and office buildings to colleges, prisons, park facilities and affordable housing. The Division of Capital Asset Management is the state's primary vertical construction agency. Other state agencies involved in public construction include the Department of Housing and Community Development, the Massachusetts Port Authority and the new School Building Assistance Authority. The Massachusetts Technology Collaborative oversees the MA Renewable Energy Trust Fund, which provides feasibility, design and construction assistance for green buildings and schools. Additional ways that the Commonwealth influences construction practices include development of state energy and building codes and regulations and the Massachusetts Environmental Policy Act (MEPA) environmental review process.

### *Background*

Sustainable design and construction is important because buildings have been found to be a major source of air pollution, greenhouse gas emissions, energy consumption and waste generation. High performance green buildings can significantly reduce environmental and health impacts and can lead to long-term savings in operations and maintenance costs.

This current Roundtable is based on a similar one-day effort held in 2002, when over 50 public and private professionals involved in design and construction met and identified a number of key barriers to successful green building in public projects. The preliminary barriers documented by this group included the need for more education and training (for state operators & the trades involved in the design & construction of buildings), incentives (financial & otherwise), leadership, clear standards and measurements of success, a conducive bidding and awarding process, and a better understanding of first cost vs. operating cost issues.

### *Structure*

The current Sustainable Design Roundtable was established by a grant from the MTC to establish a 20 month public/private Roundtable process, coordinated by EOE, DCAM and MTC. EOE Secretary Ellen Roy Herzfelder and DCAM Commissioner David Perini invited high-level representatives from 55 agencies, companies and non-profit organizations to participate in the Roundtable. Fifty-one organizations responded by stating they would like to participate in the Roundtable process.

### *Goals*

The Sustainable Design Roundtable goals and objectives are threefold:

- To *foster and promote dialog* about green building issues between public and private design and construction professionals and other experts,
- To *examine key barriers* to sustainable design and construction and *develop consensus* recommendations on how to address these barriers, and
- To *promote widespread incorporation* of sustainable design practices and technologies into all state construction.

First meeting goals and objectives are:

- To initiate *communication* about sustainable design between those responsible for funding, planning and managing public construction and those who design and construct the buildings,
- To *discuss* Roundtable rationale and goals and *reach consensus* on the Roundtable process, goals and workplan,
- To *form working groups* and *agree* on group logistics,
- To *present initial conclusions* by working group on the key issues surrounding their barriers and *suggest actions* that would address the barriers, and
- To *form a steering committee* to provide guidance, feedback and direction.

### **Discussion of Key Barrier Categories**

**Eric Friedman, Executive Office of Environmental Affairs**

***Director of State Sustainability Program and Co Chair, Sustainable Design Roundtable***

Interviews with key stakeholders in the fall of 2004 showed that the barriers to sustainable design and construction were similar to those identified in 2002. However, many believed that the barrier on standards and measurement should be separated into a sustainable design metrics category and a standards, codes and regulations category to better describe the issues.

When members agreed to participate on this Roundtable, they prioritized the three barriers that they wanted to work on during the year-long process. Roundtable staff assigned them to one of these categories. After a meeting break, members participated in break-out sessions with others in their working group.

### **Working Group Breakouts**

The participants were separated into seven working groups. Appendix C contains a list of working group members. The working groups held discussions on these key barrier categories:

1. Education and Training
2. Capital vs. Operating Budget
3. Bidding and Awarding Process
4. Vision and Leadership
5. Incentives
6. Sustainable Design Metrics
7. Standards, Codes & Regulations

These groups were led by a facilitator from EOE, DCAM or Office of Commonwealth Development to help them select a Chair and answer the following three questions:

- What are the key issues surrounding this barrier?
- What are the initial key recommendations that address these barriers?
- What kind of assistance is required to address these barriers and recommendations (e.g. working group expertise, roundtable staff, outside consultants) and why?

The following are short descriptions of the working groups and the notes taken at each working group table. The results of each working group signify a starting point for future work. The working groups selected a Chair to help guide the group during the upcoming year as the Roundtable makes progress towards arriving at consensus recommendations to address barriers to sustainable design and construction in public buildings.

## **1/13/05 MA Sustainable Design Roundtable Working Group Notes**

### **Key Barrier Issues, Initial Recommendations, and Resource Needs**

#### **Group 1: Education and Training**

Building designers, owners, managers and state officials should understand how building green affects the cost, material selection, and design process, as well as how to measure green building performance and benefits. This working group will identify on-going needs for tools, training, and communication channels for different stakeholders in the public and private sectors.

#### **Key Barrier Issues:**

- Access to resources (information)
  - Prioritization/coordination
  - Providing examples/template rather than “citing resources”
  - Quality control – need “best of”
- Insufficient funding for education/training
- Lack of information on benefits and quantifying measures (especially productivity, health, etc.)
  - Need clear “pro” arguments (other than moral)
  - Identify benefits to owners, architects, contractors, etc.
- Education around process
- Needed for design professionals and owners
- Systems thinking
- Integration of different design building professions (owners, architects, contractors, engineers)
- Disconnects in communication
- Team/communication building skill development (challenging each other appropriately and asking the right questions)
- Clarification of responsibilities/documentation (especially for LEED certification—to happen up-front)
- Decision to LEED certify (instead of just building to LEED certification levels)
- Owners carry most of the burden for the decision to go LEED or not
- Vision and leadership—want a directive from the governor
- Issues can be impacted by politics
- Turf, authority issues related to inter-departmental interactions
- Competing priorities
- State role in design/construction professional training and education

#### **Initial Recommendations:**

- Support creation of a model document
- Organize a clearinghouse/resource center to coordinate information
- Collect proof in the form of case studies, local (DCAM) examples
- Record lessons learned
- Utilize more tools (like e-benchmarking)
- Design and conduct trainings
- Achieve agreement on standards
- Work towards a common long-term vision
- Language—use “high performance” instead of /in addition to “green”
- Request policy statement on green building from DCAM or governor
- Organize training or coordinated processes
- Code officials – find ways to enforce code more effectively, hold them accountable for enforcement
- Public outreach/marketing
  - Leverage current outlets
  - Municipal work and connections
- Provide training on operations/maintenance

## **Group 2: Capital vs. Operating Budget**

The lifetime performance of a building and its systems can be compromised by short term financial considerations that do not include life cycle cost analysis as part of the decision making process. This working group will examine the schism between capital, or first costs, and long term operating costs, and study how both types of costs can be considered when making decisions about building design, siting, and technology and material choices.

### **Key Barrier Issues:**

- Direction to public projects already exists for some but not for all
  - Follow-through is lacking
  - Resources are not built into the design process
  - Standards exist for DCAM but may not exist for other agencies
- Feasibility study/project budget
  - Time and money requirements—set aside or not?
  - SOW for EE/SD needs to be identified early in the design process and contracting process (bid documents)
  - Time and money are necessary early in the SD/DD phase
- State requirements for LCA (life cycle cost analysis) should result in the inclusion of EE/SD elements and oversight to ensure both method and adoption of ECM
  - Is there an opportunity to capitalize downstream savings from better performing buildings?
  - Tools: Energy modeling both pre- and post-operational

### **Initial Recommendations:**

- Examine current rules for budget allocation on construction projects
- Develop guidelines for use of both Capital and O&M budgets to support sustainable goals
- Financial mechanisms
  - Loan (backed by downstream savings)
  - Annuities for O+M
- Unify O+M budget with capital budget
- Tie funding for O+M to capital budget
- Funding for capital cost increases needs to be made for SD+EE investments
- State link downstream O+M to capital via feasibility study estimate costs for O+M
- Analogous to SBAD 2% incentive for better performance
- Demonstrate full costs of:
  - Building (and designing)
  - Operating—utilities and other costs
  - Maintenance
  - Repair/replacement
  - Retro-commissioning
  - Quantification of not-easily-measured values
  - Recognition of performance improvements
    - Productivity/health
- Offer rewards for performance metrics for achieving good O+M savings (not by reducing their budget)

### **Resources Needed:**

- Legal guidance
- Policy guidance
- Research on best practices in other states regarding construction and delivery
- Internal/marketing/communication among state agencies involved in sustainability. Plan to focus on 'Asset Value' versus first cost conditions

### **Group 3: Bidding and Awarding Process**

The current bidding and award process may not fully encourage integrated design nor does it guarantee the selection of professionals with significant experience in sustainable design. This working group will investigate methods for promoting sustainable approaches in state bidding and awarding procedures, especially in light of construction reform legislation passed earlier this year.

#### **Key Barrier Issues:**

- No requirement for sustainable qualifications in filed sub-bidders
- No Pre-qualification of:
  - Designers
  - Other professionals (movers, commissioning agents, legal, project managers)
  - Construction services
    - Construction managers
    - General contractors (lump sum)
    - Design-build firms
- Project cost threshold too low for utilizing state contracts – not changed
- Chapter 149 may prohibit sole sourcing to utilities for M/E upgrades
- Possible unawareness of pre-qualification process by awarding authorities
- Poor communication on sustainability of products from OSD to PMs/designers
- Sole source bidding on sustainable products discouraged
- Lack of mechanism to discourage contractors and subcontractors from use of “equal” products that are not truly equal

#### **Initial Recommendations:**

- Examine Chapter 149 reform
- Provide input to DCAM's regulation drafting process
- Create development guidelines, implementation guide
- Broader performance based specifications – life cycle based specifications v. first cost
- Extend warranties on “or equal” products
- Give centralized control to the building owner instead of hiring contractors and subcontractors
- Implement a method of gathering and communicating lessons learned on sustainable products – sharing of “successful” specifications
- Follow-up on actual execution of specifications and installation of products
- Standardize specifications
- Extend warranty/performance expectations
- Give design team a stake in the cost of running the building (performance-based fees)

#### **Resources:**

- Summary of Chapter 149 changes
  - DCAM – attorney assigned to implement
  - Office of Inspector General

#### **Resources Needed:**

- Legal guidance
- Input/thoughts of Legislators and key legislative staff
  - Diane Wilkerson (Senate)
  - Marty Walsh (House)
- Research on best practices in other states regarding construction and delivery
- Internal/marketing/communication among state agencies involved in sustainability



## **Group 4: Vision and Leadership**

Many have stated the need for clear and definitive leadership from high levels of government and other key sectors. This working group will study ways in which these leaders could be encouraged to more effectively demonstrate a high level of support to ensure that sustainable design is accepted and implemented at all levels of government projects.

### **Key Barrier Issues:**

- Current advocates at the state are not identified/recognized
- Small, uncoordinated local efforts need integration
- Can political focus/agendas/priorities transcend politics?
- Green will be an additional regulatory burden leading to more expense
- How can we encourage “green”/inclusivity?
- Bureaucratic inertia - overcoming status quo
- Coordinated message needed – statewide champions
- Leaders need vision and proof
- Create a multi-layered green environment (federal/state/local)
- What is commonly accepted “green vocabulary”?
- Lack of definition of “vision”
- New construction v. renovation

### **Initial Recommendations:**

- Push education using common language and vision
  - What does “green” mean in our area of the country?
- What is the state’s Vision 2020 and how does green/sustainable design fit in?
  - How do we mainstream sustainable design? (marketing)
- How does Massachusetts stay in the forefront (e.g. anti-smoking)?
- Need to identify champions who do it everyday
- Encourage passion and drive
- Influence leaders’ value systems and culture or paradigm shift
- Capture existing information better and highlight lack of recognition
- Develop and encourage leadership
  - Bonus for LEED certification
- Executive Order? Policy statement?
- Mechanism for coordinating communication among all stakeholders
- Incorporate sustainable design into curricula (state and local)
- Identify top 50 leaders and educate them
- Marketing strategy:
  - Map out stakeholders
  - Map out resources

### **Resources Needed:**

Coordinated high level vision (defined universally, aimed locally/specific)

- Marketing of vision/message/messenger/database
  - Highlight/showcase models that work
- State agencies as leader/motivator/implementers – get in the forefront (push = regulations, pull = incentives)

## **Group 5: Incentives**

Analysis and research of green design strategies not typically done as part of public building design can be added costs. Incentives, whether financial or other, have proved successful in motivating a shift in traditional practice. This working group will recommend whether and how new incentive programs should be established, and to what degree there should be more new or existing incentive programs.

### **Key Barrier Issues:**

- Bidding and awarding process
  - Financial impacts
  - Time impacts
  - Quality impacts
  - Alternative selection/award process as an incentive for sustainable design
- Incentives needed for integrated design
- Incentives needed for commissioning
- School Building Assistance Authority as a vehicle for monetary incentives
- Incentives for each of the other six workgroups
- Paperwork: a barrier to getting financial incentives v. streamlining
- Lack of education and general awareness of sustainable design at review/finance/public agencies
- Lack of understanding of smart growth issues particularly around transportation as barriers to sustainable project siting and land use (master planning)
- Push incentives v. pull incentives: how to get people to demand sustainably designed projects
- Leadership: needs a top-down commitment of major agencies. How to get the leaders of these agencies excited about green/sustainable design? -OR- Bottom-up leadership champion committees within these agencies.

### **Initial Recommendations:**

- Create incentives for town planners to re-examine town master plans to consider smart growth ideals and adapt bylaws
- Use alternative procurement more often and make sustainable design a larger percent of award criteria (in prequalifying and selecting architects and contractors)
- Establish a ten-year plan of code upgrades in sustainable design requirements for state and local projects
- Reward city and town officials for LEED accreditation
- Inventory of currently offered incentives
- Faster/easier permitting and project review for sustainable projects (an incentive)
- Encourage understanding of the technical program for a project along with commissioning early in the process

## **Group 6: Sustainable Design Metrics**

Documenting and measuring the benefits of green buildings, while critical to promoting green building design, are not always conducted using standard information and methodologies. The working group will investigate ways in which to better document sustainable design and construction in Massachusetts.

### **Key Barrier Issues:**

- LEED Certification
  - Cost of documenting sustainable ability via LEED
  - Too building specific – no established standard for community-wide practice
  - Different standards – need to establish a unified standard, maybe LEED is not the best choice.
  - Not comprehensive enough to capture all aspects of sustainability
- Need a baseline of where we are on performance (don't know current status of state buildings)
- Political aspects of reporting building performance
- Lack of staff (and an inherent bias) to assess performance, though use of LEED helps as it brings in outside staffing that is unbiased.
- The State is not tracking performance after certification to insure expected savings are actually achieved. Building should be reassessed every few years.
- People look at sustainability too narrowly based on their area of expertise.
- A broad enough standard of sustainability is not present and is needed. Engineering based standards are not broad enough to capture all necessary aspects of sustainability such as:
  - health of employees, students or the community at large;
  - productivity
  - environmental impacts external to the building
  - economic competitiveness, etc.
- How to transition from science based to social (“fuzzy”) metrics? Social aspects not adequately measured.
- Outside the building issues/impacts neglected.

### **Initial Recommendations:**

- Life cycle costing
- Performance-based designer fees
- Tie sustainable design metrics to building-specific performance and broadest issues of social and economic benefits

### **Resources Needed:**

- Need to gather information on existing state initiatives and how they measure success
- Research/summarize state activities/standards and measurements in use (in-house)

## **Group 7: Standards, Codes and Regulations**

Building codes, requirements and regulations can be barriers to sustainable design if they are not coordinated or have common policy goals. This working group will examine state and local regulations as they pertain to design and construction and make recommendations on how they can be updated, coordinated or streamlined to achieve sustainable design policy goals.

### **Key Barrier Issues:**

#### *1. Standards and codes and federal requirements*

- Issues with codes not communicated to code writers – no communication mechanism
- Not written to legally mandate (or even encourage) green building
- Integration, education and visibility for building codes
- Fire protection (e.g. underfloor delivery system for air - sprinkler system required (expensive))
- ADA (federal)
- Codes may be a disincentive to implementing sustainable technologies
- Integrated design is not part of approach or understanding
- Lack of education/understanding of certain technologies and green design in general
- Parallel movement with sustainability transformation
- Do variances lead to change?

#### *2. State laws and regulations*

- Public bidding laws (must select lowest bidder) – there is a nexus with the “bidding” subgroup.
- Sequencing design→bid→contract. Earlier participation of potential contractors would help with integrated design, but current bid laws make this difficult (if not illegal)
- Chapter 13 promotes energy efficiency. Concern for the next generation if the IBC is adopted.
- Life cycle cost analysis (e.g. required, but no teeth; regulations not strong enough; LCCA just ends up being a formality and is not used)
- DEP regulations (e.g. wastewater and hazardous waste)
- Agency funding/staffing
- Integrated design is not part of approach or understanding
- Lack of education/understanding of certain technologies and green design in general
- Are designated recycling areas potential risks?
- Regulations regarding recycling - potential violation of codes/regulations
- Lack of funding and staffing

#### *3. Municipal ordinances and approvals, local zoning laws, local inspections*

- Zoning (anti-density, anti-mixed-use)
- Barriers related to dissemination of information & education, especially to inspectors, plumbers, etc.
- Integrated design is not part of approach or understanding
- Lack of education/understanding of certain technologies and green design in general
- Lack of funding and staffing

### **Next Steps:**

- Develop a baseline
  - Determine which standards and codes are barriers and how
  - Determine which state laws and regulations are barriers and how
  - Determine which local ordinances, zoning laws, etc are barriers and how
- Investigate other models (different states, countries)
- Revisit Ward Commission/construction reform (bid and contract)
- Reach out to get feedback from practitioners on problem areas (BSA, other groups)
- Look into New Buildings Institute (<http://www.newbuildings.org/>) and other resources
- Review DCAM Form 9, Appendix N
- Governor's use of Executive Orders for energy efficiency
- Climate Change Action Plan commitments
- Beware of overlap with other workgroups
- Education to keep up with new developments/inspectors/culture

## **Working Group Presentations**

**John DiModica, Division of Capital Asset Management**  
***Sustainable Design Program Manager and Co Chair, Sustainable Design Roundtable***

The meeting reconvened after the working groups concluded their tasks. A representative from each working group reported on the ideas developed in their group. These presentations were summarized from the notes taken during the breakout sessions.

## **Next Steps**

In the last segment before lunch, the Roundtable turned its focus to the next steps. A preliminary workplan was presented that includes a schedule of five additional meetings and a general timeline of tasks. These tasks involve working group updates at each Roundtable meeting, special topic presentations, and the scoping and implementing of research studies on barriers to be done by in-house staff or outside consultants.

The schedule for the Roundtable meetings that was agreed upon by the participants were morning sessions every two to three months, generally on the second Thursday of the month at locations to be determined in the Boston area:

- Meeting 2 – March 10, 2005
- Meeting 3 – June 9, 2005
- Meeting 4 – September 15, 2005
- Meeting 5 – December 8, 2005
- Meeting 6 – February 9, 2006

At the breakout sessions, working groups planned the next time to meet in small groups in order to refine their preliminary findings on barriers, strategies and resource needs. The working groups are preparing presentations for the second Roundtable meeting on March 10, 2005 that will address four areas of their barrier topics:

1. State-of-the-art in research, reports, analyses, programs, and examples
2. Scope of problem
3. Scope of solutions - financial, legislative, regulatory, technical and outreach
4. Process for how to get to recommendations –  
Is research necessary? Should such research be provided? Do we need to go internally or should consultants be hired to provide greater detail for certain scopes of work?

## **Logistics**

At subsequent Roundtable meetings, the working groups will provide progress reports and updates on ongoing consultant and in-house research. The last Roundtable meeting will present final consensus recommendations and develop a timeline and workplan for the recommendations.

During the course of the morning, several Roundtable members offered to serve on the Steering Committee, as well as offered to sponsor meetings at their offices or give in-kind contributions. A Steering Committee will be formed using this input to provide guidance, feedback, and direction to the Roundtable and Roundtable staff. Turner Construction was thanked for underwriting the lunch.

## **Meeting Evaluation and Comments**

During lunch, a discussion was held on what worked and what did not during the morning and solicited suggestions for ways to improve future meetings. The following are notes taken during this segment:

- Need to sustain effort over 13 months
- How to ensure that recommendations are implemented
- How to make this an inclusive organization going forward
- Invite trade organizations to be part of the Roundtable
- Change terminology from “sustainable design” to broaden the scope, such as “sustainable facilities” or “high performance buildings”.
- Need a sprawl/siting/master plan barrier category
- Solicit state and private colleges and universities to do some of the research

### **Pluses:**

- 55-60 people here for half day and for 12 months shows commitment/enthusiasm
- So much expertise in the room
- Assigning to subgroups before the meeting
- Sticking to schedule
- Organization of the Roundtable
- Clear message of mission and agenda
- Great to get keynote speakers

### **Minuses:**

- Noise factor – better to do separate break out rooms
- Daunting task
- Need more guidance on expectations and deliverables
- What homework should be done before next meeting
- Provide one page checklist of what is wanted at 3/10 meeting
- Consistency of facilitators over the next 12 month period
- Have recycling at meetings
- Open up to community activists to help with education

## **Conclusion**

This Roundtable was an important jump-start to the process to promote sustainable design and construction in public buildings. This meeting began the implementation of a Roundtable that will encourage dialog and communication about green building issues between public and private design and construction professionals. Key barriers to sustainable design and construction are being examined with the goal of eventually developing consensus recommendations on how to address these barriers. The ultimate mission of the Roundtable was articulated, namely that the Roundtable recommendations will provide for widespread incorporation of sustainable design practices and technologies into all state public construction.

Through small groups and a large roundtable format, design and construction professionals and others responsible for managing and funding public construction projects began discussions on the status and effectiveness of sustainable design in public buildings. During the first meeting, the members reached consensus on the Roundtable process, its goals and a preliminary workplan.

The first meeting of the Roundtable highlighted the key issues surrounding barriers to sustainable design in public construction and began a process for coming up with recommendations by stakeholders from different disciplines. Many firms, consultants, and agencies at high levels of representation chose to attend this first session, knowing that it involves future commitment over the year. The ideas generated provide an excellent basis for a series of recommendations for the Commonwealth. The challenge is to capitalize on this momentum and begin working on the next steps.

## **Appendix A**

### **COMMONWEALTH OF MASSACHUSETTS SUSTAINABLE DESIGN ROUNDTABLE**

#### **AGENDA**

100 Cambridge Street, 2<sup>nd</sup> floor  
Conference Rooms B and C  
January 13, 2005  
8:00 a.m. to 1:00 p.m.

- 8:00 – 8:30     **I. Registration and Continental Breakfast**
- 8:30 – 9:10     **II. Kick-Off Remarks**
- A. Douglas I. Foy, Secretary, Office of Commonwealth Development
  - B. Ellen Roy Herzfelder, Secretary, Executive Office Of Environmental Affairs
  - C. David Perini, Commissioner, Division of Capital Asset Management
  - D. Rob Pratt, Director, Renewable Energy Trust
- 9:10 – 9:25     **III. Roundtable Introductions**
- 9:25 – 9:45     **IV. Background, Structure and Goals**
- A. Massachusetts Construction Programs
  - B. Roundtable History
  - C. Roundtable Goals and Objectives
  - D. First Meeting Objectives
- 9:45 – 10:00   **V. Discussion of Key Barrier Categories**
- 8. Education and Training
  - 9. Capital vs. Operating Budget
  - 10. Bidding and Awarding Process
  - 11. Vision and Leadership
  - 12. Incentives
  - 13. Sustainable Design Metrics
  - 14. Standards, Codes & Regulations
- 10:00 – 10:15   **BREAK**
- 10:15 – 11:15   **VI. Working Group Breakouts**
- 11:15 – 11:50   **VII. Presentations by Working Groups**
- 11:50 – 12:15   **VIII. Next Steps**
- A. Workplan
  - B. Steering Committee Membership
  - C. Next Meeting Date and Place
  - D. Sponsorship
- 12:15 – 1:00    **IX. Lunch - Comments / Questions / Meeting Evaluation**

## **Appendix B**

### **1/13/05 Sustainable Design Roundtable Meeting Attendees (p. 1 / 2)**

<b>Name</b>	<b>Organization</b>
Amann, David	NSTAR
Arons, Dan	Boston Society of Architects c/o ArchiTerra
Asbury, Tamara	National Association of Industrial & Office Properties
Batshalom, Barbara	The Green Roundtable
Beasley, Keith	Massachusetts Port Authority
Benevides, Linda	Executive Office Of Environmental Affairs
Boehs Jr., John H.	Arup
Brown, Paul S.	Drummeys Rosane Anderson
Buckley, Joseph	Department of Housing & Community Development
Burson, David S.	Massachusetts State College Building Authority, Boston
Chandler, Robert	Goody Clancy
Davis, Michael	Bergmeyer Associates, Inc.
Deegler, Marcia	Operational Services Division
Devol, Jim	Gilbane Building Company
DiModica, John	Division of Capital Asset Management
Eglinton, Aisling	Executive Office Of Environmental Affairs
Fisher, Kenneth I.	Boston Society of Architects c/o Gensler Associates
Foy, Douglas	Office of Commonwealth Development
Friedman, Eric	Executive Office Of Environmental Affairs
Gately, Mary	Association of General Contractors
Gaertner, Kurt	Executive Office Of Environmental Affairs
Greene, Cynthia	US EPA New England
Grover, William	ICON Architects
Hanchar, Mark	Turner Construction
Henderson, Richard	Massachusetts Development Finance Agency
Hunt, James	Executive Office Of Environmental Affairs
Hwang, One	Operational Services Division
Ide, Jenna	Division of Capital Asset Management
Kearney, Janis	Massachusetts Bay Transportation Authority
Lelek, M. Magda	Andelman & Lelak Engineering
Masland, Lawrence	Division of Energy Resources
McAteer, Michael	National Grid USA
McGlynn, Edward	NSTAR Electric
McHugh, Eileen	Division of Energy Resources
Nikoayev, Dimitriy	Operational Services Division
Nolan, Marie Zack	Executive Office Of Environmental Affairs
O'Neill, Fred	Suffolk Construction
Pain, Aditi	University Of Massachusetts Boston
Pearson, John	Operational Services Division
Perini, David	Division of Capital Asset Management
Petrucelli, Robert	Association of General Contractors
Picardo, Steven A.	Bank of America



**1/13/05 Sustainable Design Roundtable Meeting Attendees (p. 2 / 2)**

Pratt, Rob	Renewable Energy Trust
Ranger, Andrea	Department of Education
Reyelt, William	Department of Housing & Community Development
Riley, Thomas	Board of Building Regulations and Standards
Roy Herzfelder, Ellen	Executive Office of Environmental Affairs
Russell, Jenny	Merck Family Funds
Savoie, Jeffrey	Consigli Construction
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## Appendix C

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